

What is claimed is:

[Claim 1] 1. A finless training projectile comprising:
a body;
a nose secured to a forward section of the body;
a tail secured to a rearward section of the body;
wherein the tail comprises a generally cylindrical tail piece and a slotted tail flange;

wherein the slotted tail flange comprises a plurality of radially angled slots for achieving spin during flight of the training projectile, to compensate for aerodynamic or mass asymmetries; and

wherein the nose provides increased mass to move a center of gravity of the projectile to a forward position, and allows a center of pressure to remain in a constant position during flight, so that a distance between the center of gravity and the center of pressure remains constant during flight, thereby providing improved flight stability over an extended range.

[Claim 2] 2. The training projectile of claim 1, wherein the body and the tail are dimensioned to be fired from any one of a smooth bore or a rifled cannon of 120 mm.

[Claim 3] 3. The training projectile of claim 1, wherein the body and the tail are dimensioned to be fired from any one of a smooth bore or a rifled cannon of 105 mm.

[Claim 4] 4. The training projectile of claim 1, wherein the slotted tail flange comprises a range of approximately 2 to 8 the radially angled slots that are spaced evenly around a circumference of the slotted tail flange.

[Claim 5] 5. The training projectile of claim 1, wherein the radially angled slots have a width of approximately 18.1 mm.

[Claim 6] 6. The training projectile of claim 1, wherein the radially angled slots have a depth of approximately 10.1 mm.

[Claim 7] 7. The training projectile of claim 1, wherein the tail comprises:
a cylindrical section;
wherein the cylindrical section has a diameter similar to a
diameter of the short cylindrical section of the body; and
wherein the cylindrical section is connected to the short
cylindrical section of the body.

[Claim 8] 8. The training projectile of claim 1, wherein the radially angled slots define an angle of approximately 30 degrees with respect to an axis of the training projectile.

[Claim 9] 9. The training projectile of claim 1, wherein the body comprises an inwardly tapering section; and
wherein the body comprises a short cylindrical section.

[Claim 10] 10. The training projectile of claim 1, wherein the nose has a generally ogival shape.

[Claim 11] 11. The training projectile of claim 1, wherein the nose has a generally cone shape.

[Claim 12] 12. The training projectile of claim 1, wherein the nose has a generally ogival/cone combination shape.

